

PUBLICATION NUMBER : 03022518
PUBLICATION DATE : 30-01-91

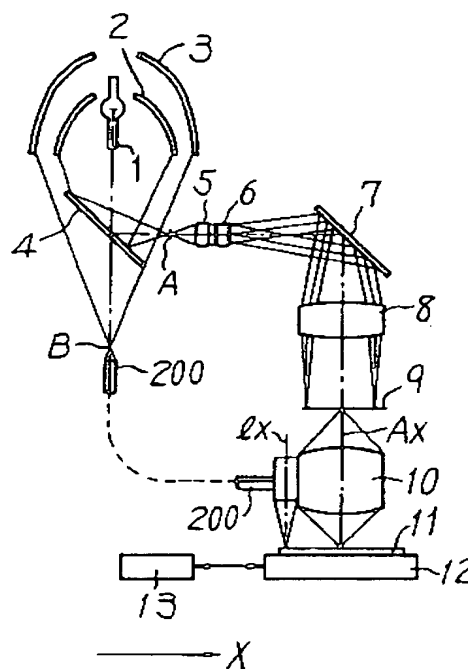
APPLICATION DATE : 20-06-89
APPLICATION NUMBER : 01157165

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INT.CL. : H01L 21/027

TITLE : ILLUMINATING OPTICAL DEVICE



ABSTRACT : PURPOSE: To guarantee the supply of stabilized high output of light flux to the plane of illumination at all times by a method wherein an exposure light, having the prescribed narrow-band wavelength, sent from the same light source and an alignment light of the prescribed wavelength band are made possible to extract while infrared rays are being emitted.

CONSTITUTION: A first elliptical dichroic mirror 2 reflects far ultraviolet rays of the wavelength which are formed in the band narrower than the light emitted from an ultrahigh voltage mercury lamp 1, and the above-mentioned light is condensed at the second focussing position A of the first elliptical dichroic mirror 2 through the intermediary of a dichroic mirror 4, and on the other hand, the light flux of the wavelength band which is unnecessary, for example, are transmitted. A second elliptical dichroic mirror 3 reflects the light of the wavelength in the visible region which is necessary for alignment, by the light sent from the light source passing the first elliptical dichroic mirror 2, and the light is condensed at the second focal point position B of the second elliptical dichroic mirror 3 through the intermediary of a dichroic mirror 4. On the other hand, the unnecessary light passing through the second elliptical dichroic mirror 3 is radiated in the circumferential part. In the vicinity of the position of a light source image formed by the alignment light condensed at the second focal position B, the end of incidence the light guide 200, consisting of a plurality of light fibers, is arranged, and the alignment light, with which a light source image is formed on the second focal point position B, is sent to an alignment light system..

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